

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An electronic ~~circuit~~circuit, comprising:
a shift circuit ~~for shifting that shifts~~ j-bit digital data (j is a natural number) to be converted into k-bit digital data (k is a natural number); and
a correction circuit ~~being that is~~ electrically ~~connected~~coupled to the shift circuit, the correction circuit continuously ~~changing~~changes the k-bit digital data ~~which that~~ is obtained by the shift circuit in accordance with the change of the j-bit digital data.
2. (Currently Amended) The electronic circuit according to Claim 1,
~~wherein~~ the k-bit digital data is ~~being~~extended digital data which is larger than the j-bit digital data; and
~~wherein~~ the shift circuit ~~classifies~~classifying a range of the j-bit digital data into a plurality of groups and ~~shifts~~shifting the digital data of each group by a predetermined number of bits in accordance with each group to convert it into the k-bit digital data.
3. (Currently Amended) The electronic circuit according to Claim 2,
~~wherein~~ the correction circuit is ~~being~~electrically connectedcoupled to electro-optical elements;
~~wherein~~ the j-bit digital data is ~~being~~luminance gray scale data ~~for controlling that controls~~ the luminance of the electro-optical elements; and
~~wherein~~ the k-bit digital data is ~~being~~extended luminance gray scale data ~~for controlling that controls~~ an amount of analog current ~~which that~~ is supplied to the electro-optical elements.
4. (Currently Amended) The electronic circuit according to Claim 1,
~~wherein~~ the correction circuit is ~~being~~an adder.

5. (Currently Amended) The electronic circuit according to Claim 1,
~~wherein~~ the shift circuit ~~determines the~~ determining a number of bits by which
the j-bit digital data is shifted in accordance with the value of the j-bit digital data.

6. (Currently Amended) The electronic circuit according to Claim 5,
~~wherein~~ the shift circuit ~~performs~~ performing shifting to the upper side so that
a larger value group is shifted by a larger number of bits.

7. (Currently Amended) An electro-optical ~~device~~ device, comprising:
a control circuit ~~for outputting that~~ outputs j-bit luminance gray scale data (j is
a natural number);

a driving circuit ~~for generating that~~ generates analog driving signals based on
the j-bit luminance gray scale data; and

a pixel circuit ~~for driving that~~ drives current driven elements based on the
analog driving signals,

~~wherein~~ the driving circuit ~~comprises~~ including:

a shift circuit ~~for shifting that~~ shifts the j-bit luminance gray scale data to
convert it ~~the data~~ into k-bit digital data (k is a natural number);

a correction circuit ~~being that is~~ electrically connected ~~coupled~~ to the shift
circuit, the correction circuit continuously changing the k-bit digital data ~~which that~~ is
obtained by the shift circuit in accordance with the change of the j-bit luminance gray scale
data.

8. (Currently Amended) The electro-optical device according to Claim 7,
~~wherein~~ the k-bit digital data ~~is~~ being extended digital data ~~which that~~ is larger
than the j-bit luminance gray scale data; and

~~wherein~~ the shift circuit ~~classifies~~ classifying a range of the j-bit digital data
into a plurality of groups and ~~shifts~~ shifting the digital data of each group by a predetermined

number of bits in accordance with each group to convert ~~it~~ the digital data into the k-bit digital data.

9. (Currently Amended) The electro-optical device according to Claim 7,
~~wherein~~ the correction circuit ~~is~~ being an adder.

10. (Currently Amended) The electro-optical device according to Claim 7,
~~wherein~~ the shift circuit ~~determines the~~ determining a number of bits by which
the j-bit luminance gray scale data is shifted in accordance with the value of the j-bit
luminance gray scale data.

11. (Currently Amended) The electro-optical device according to Claim 10,
~~wherein~~ the shift circuit ~~performs~~ performing shifting to ~~the~~ an upper side so
that a larger value group is shifted by a larger number of bits.

12. (Currently Amended) The electro-optical device according to Claim 7,
~~wherein~~ the current driven elements ~~are~~ being EL elements.

13. (Currently Amended) The electro-optical device according to Claim 12,
~~wherein~~ the EL elements ~~comprise~~ including light emitting layers made of
organic materials.

14. (Currently Amended) An electronic ~~apparatus~~ apparatus, in which the
electronic circuit according to Claim 1 is mounted thereon.

15. (Currently Amended) An electronic ~~apparatus~~ apparatus, in which the electro-
optical device according to Claim 7 is mounted thereon.